



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,662	12/04/2003	Harald Keller	54114	5838

7590 09/30/2004

Herbert B. Keil
KEIL & WEINKAUF
1350 Connecticut Ave., N.W.
Washington, DC 20036

EXAMINER

PENG, KUO LIANG

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,662

Applicant(s)

KELLER ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/18/04 IDS.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/18/04, 12/4/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Abstract of JP 62-154555.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1 (line 2), it is not clear as to how high is the “high molecular mass”? Examiner is unable to find a definition for this in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-4 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohm (GB 993 794).

Rohm discloses a wax formulation comprising a wax, a polymeric dispersion agent derived from isobutylene copolymers. The wax composition can be used for surface polishing. A silicone oil can be used. (page 1, lines 9-71, page 2, line 93 to page 3, line 16, page 3, lines 73-79, page 4, lines 23-29, Experiment A and Examples 2 and 9) The amounts of wax and the polymer dispersion are described in col. 3, lines 80-106 and further illustrated in Examples. Note that the isobutylene copolymers are "rubbers" as indicated in page 2, line 102 to page 3, line 16, which is further exemplified as Enjay 035 Butyl Rubber in Experiment A. Thus, the isobutylene copolymers indeed have high molecular masses.

5. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Rohm as evidenced by Lance-Gomez (US 5 393 521).

Rohm discloses a wax formulation, *supra*, which is incorporated herein by reference. Rohm further teaches that the silicone oil can be a General Electric SF-96(100). Lance-Gomez teaches that SF-96(100) has a viscosity of 100 cSt. (col. 13, lines 11-15)

6. Claims 1, 3-4, 8-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Each (US 5 445 670).

Each discloses a wax formulation comprising an effective amount of abrasive particulates to enhance the non-slip characteristics of said composition, said abrasive particulates having an average particle size of up to about 100 microns. The surface finish-composition can be water-based or oil-based. In one embodiment the surface-finish composition further comprises water, at least one acrylic resin and at least one synthetic wax. Optional ingredients include one or more alkali-soluble resins, leveling agents, water-soluble solvents, plasticizers, defoaming agents, fragrance enhancers, biocides, and the like. These compositions are useful as anti-slip floor finishes. The wax can be any synthetic wax that can be dispersed, dissolved or emulsified in water. These waxes include the polyalkylenes such as polyethylene, polypropylene, polybutene, polyisobutylene, and the like. In one embodiment, it is useful to employ solutions or emulsions of such waxes. The waxes identified in McCutcheon's "Functional Materials," 1992, North American Edition, at pp. 285-290 can be used, these pages being incorporated herein by reference. Commercially available waxes that are useful include Esi Cryl 43, Esi Cryl 252 and Esi Cryl 325, each of which are identified as being polyethylene wax emulsions available from Emulsion Systems

Inc. of Valley Stream, N.Y. Mixtures of two or more of the foregoing synthetic waxes can be used. Typically these waxes are present in the inventive compositions at concentrations in the range of about 0.5% to about 10% by weight, and in one embodiment about 1% to about 8% by weight, and in one embodiment from about 2% to about 5% by weight. The alkali-soluble resin can be any carboxyl-containing resin that is soluble in an alkaline aqueous solution. In one embodiment these resins are soluble in water to the extent of at least about one gram per liter of water at 25°C. Examples of such resins include carboxyl-containing alkylene resins (e.g., carboxyl-containing polyethylene, polypropylene, polybutylene, polyisobutylene, etc., as well as carboxyl-containing copolymers containing units of ethylene, propylene, butylene, isobutylene, etc.), styrene maleic anhydride copolymers, styrene acrylic acid copolymers, pentaerythritol-based carboxyl-containing resins, rosin-based resins, and the like. In one embodiment the alkali-soluble resin is other than any of the above-described acrylic resins. In one embodiment the alkali-soluble resin is a maleated rosin ester resin, a specific example of which is the resin contained in Resinall 802, which is available from Resinall Corporation and identified as a resin solution. Mixtures of two or more of the foregoing alkali-soluble resins can be used. Typically these alkali-soluble resins are present in the inventive compositions at concentrations in

the range of up to about 5% by weight, and in one embodiment from about 0.2% to about 5% by weight, and in one embodiment from about 1.6% to about 3% by weight, and in one embodiment from about 1.6% to about 2.5% by weight. (col. 1, lines 44-57, col. 3, lines 13-58) The defoaming agent can be any defoaming agent that inhibits the development of foam when the inventive composition is mixed. Many defoaming agents are known. See, for example, McCutcheon's "Functional Materials," 1992, North American Edition, pp. 91-114, these pages being incorporated herein by reference. Silicone defoamers are preferred. In one embodiment the defoaming agent is a dimethyl polysiloxane compound. Specific examples of antifoam agents are SWS 211, SWS-213 and SWS-214 available from Wacker Silicones Corporation of Adrian Mich. The defoaming agents are present in the inventive compositions in minor amounts sufficient to provide such compositions with enhanced defoaming properties. In one embodiment the defoaming agent is present in the inventive composition at a concentration in the range of up to about 0.1% by weight, and in one embodiment about 0.01% to about 0.08% by weight. (col. 5, lines 1-18). The preferred embodiments are further demonstrated in Examples.

7. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Each as evidenced by Hoffman (US 4 678 815).

Each discloses a wax formulation, *supra*, which is incorporated herein by reference. As mentioned previously, Each teaches the use of silicone oils such as SWS-214, etc. Hoffman teaches that SWS-214 has a viscosity of 3000 cps. (Example 1).

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yanagi (JP 62-154555).

Yanagi discloses a wax formulation comprising a polyisobutylene having a molecular weight of 700 to 10,000, which contains 1 to 30 wt% of a wax. (Abstract, page 2, upper left column to lower left column). An Abstract in English is sent along with this Office action for Applicants' reference. Furthermore, the English translation of Yanagi has been requested by Examiner. It will be available to Applicants later upon request.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Each.

Each discloses a wax formulation, supra, which is incorporated herein by reference. Each further teaches the use of oxide materials as abrasive particulates. (col. 2, lines 5-56). It is noted that the BET surface area of the oxide materials will affect the surface properties of the abrasive particulates and the resulting composition. Furthermore, Each teaches the use of the wax formulation as anti-slip floor finishes (col. 1, lines 44-57). Thus, the surface of the abrasive particulates is very important. Therefore, the surface area is a Result-Effective variable. In light of which, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize oxide materials having whatever surface area through routine experimentation in order to obtain proper surface properties of the composition. Especially, Applicants do not show the criticality of the BET surface area of the oxide materials. See MPEP 2144.05 (II). The amount of the oxide materials is described in col. 2, lines 46-56.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
September 27, 2004

Application/Control Number: 10/726,662
Art Unit: 1712

Page 10

Kuo-Liang Peng
Primary Examiner
Art Unit 1712



KUO-LIANG PENG
PRIMARY EXAMINER